



Tawny Eagle

Roofarend

Aquila rapax

The Tawny Eagle and the Bateleur *Terathopius ecaudatus* are among the most threatened eagles in southern Africa, with centres of distribution now confined to major protected areas and sparsely inhabited regions. Otherwise it occurs at low densities across the entire northern half of the subcontinent, from the arid areas of western Namibia to more mesic parts of Kwa-Zulu-Natal. Farther north in Africa it is widespread, except in extreme deserts and rainforest, and it is also found in southern Asia. The atlas data confirm the surprising persistence of a population in the Grassy Karoo (see also Boshoff *et al.* 1983).

Population densities vary widely. This has been shown to depend on soil types and primary productivity in a part of Zimbabwe (Hustler & Howells 1989), and on the extent of protected areas (Tarboton & Allan 1984; Brown 1991a). Densities vary in Zimbabwe from 0.83 pairs/100 km² on Kalahari sand and mica-schist, to 1.9 pairs/100 km² on granite, and from 1.5 pairs/100 km² in conservation areas to 0.3 pairs/100 km² outside conservation areas on similar soils in South Africa and Namibia. Based on these estimates there are about 5000 pairs in southern Africa.

The possibility of confusing the Tawny Eagle with other large brown raptors is relatively high, but the atlas data have been carefully vetted and unsubstantiated records removed, except in Zimbabwe where misidentifications probably persist, because this is where the diversity of similar species is largest. It is particularly easily confused with the closely related migrant Steppe Eagle *A. nipalensis* which shares a similar distribution, but does not occur in the Karoo. That species differs in its darker overall appearance and larger gape, and it is frequently found in flocks, unlike the usually solitary Tawny Eagle (Brooke *et al.* 1972; Clark 1992).

Habitat: It occurs mainly in woodlands, including lightly wooded areas. The vegetation analysis reflects its preferred habitat, with high reporting rates in Mopane, Kalahari, Okavango and other woodlands. In the largely treeless Karoo and

some predominantly grassland regions, it nests on pylons and in alien trees (Boshoff *et al.* 1983; Tarboton & Allan 1984).

Movements: No clear seasonal movements are apparent from the models and it is thought to be largely sedentary, with some nomadic movements, especially by immatures (Steyn 1982b).

Breeding: The models show that breeding occurs during the winter months. Egg-laying spans March–September in Zimbabwe (Irwin 1981; Hustler & Howells 1986) and April–July in the Transvaal (Tarboton *et al.* 1987b). Both regions have a May peak in egg-laying but there are proportionately more early records (April) in Zimbabwe. This pattern of earlier breeding in the north may be reflected in the models – compare the data for Zones 2 and 7 with those from Zones 1 and 5 – but the data are sparse for Zones 2 and 7.

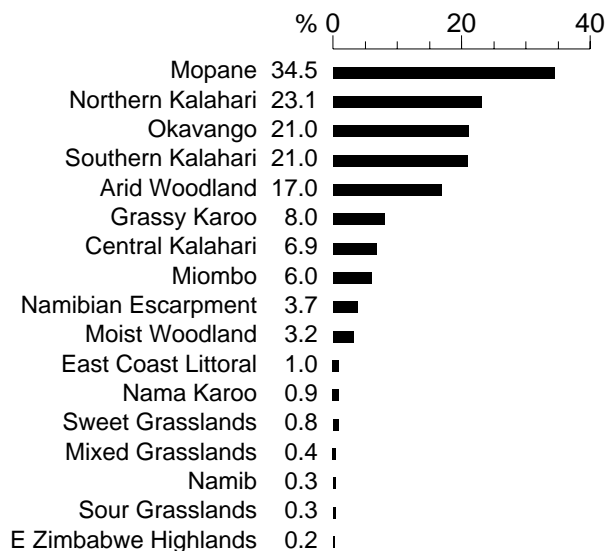
Interspecific relationships: The Tawny Eagle's range overlaps with many other scavengers and its pirating of species such as the Bateleur adds significantly to its food acquisition (Steyn 1982b; Watson & Watson 1987).

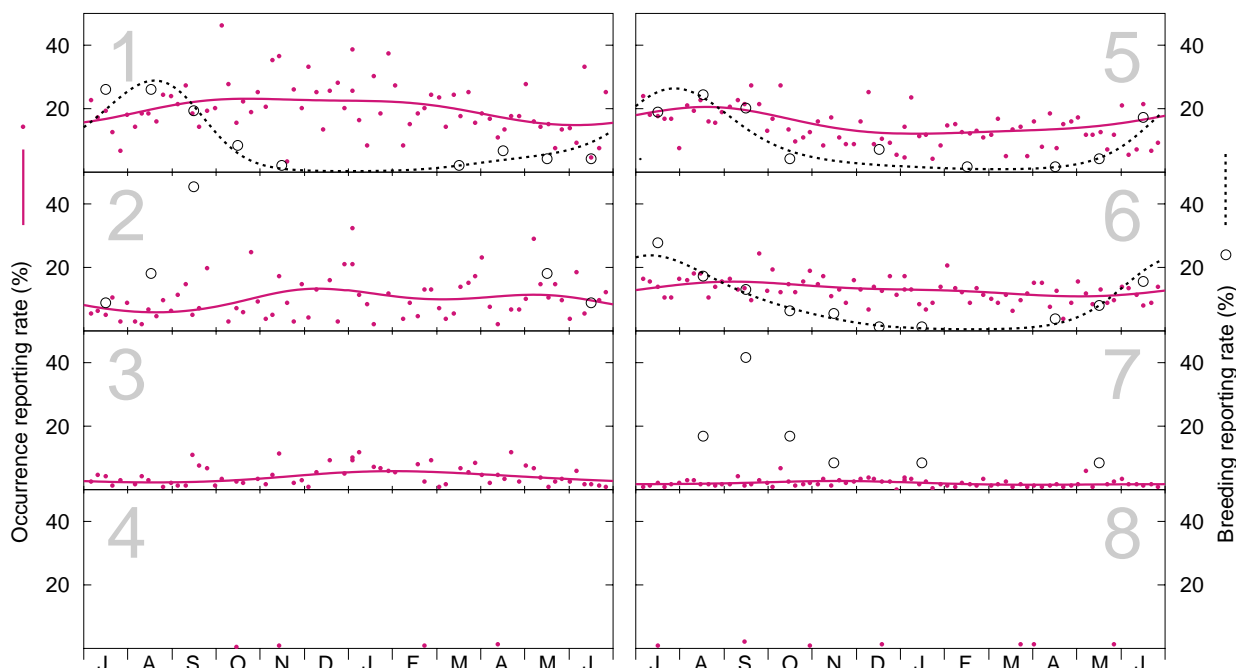
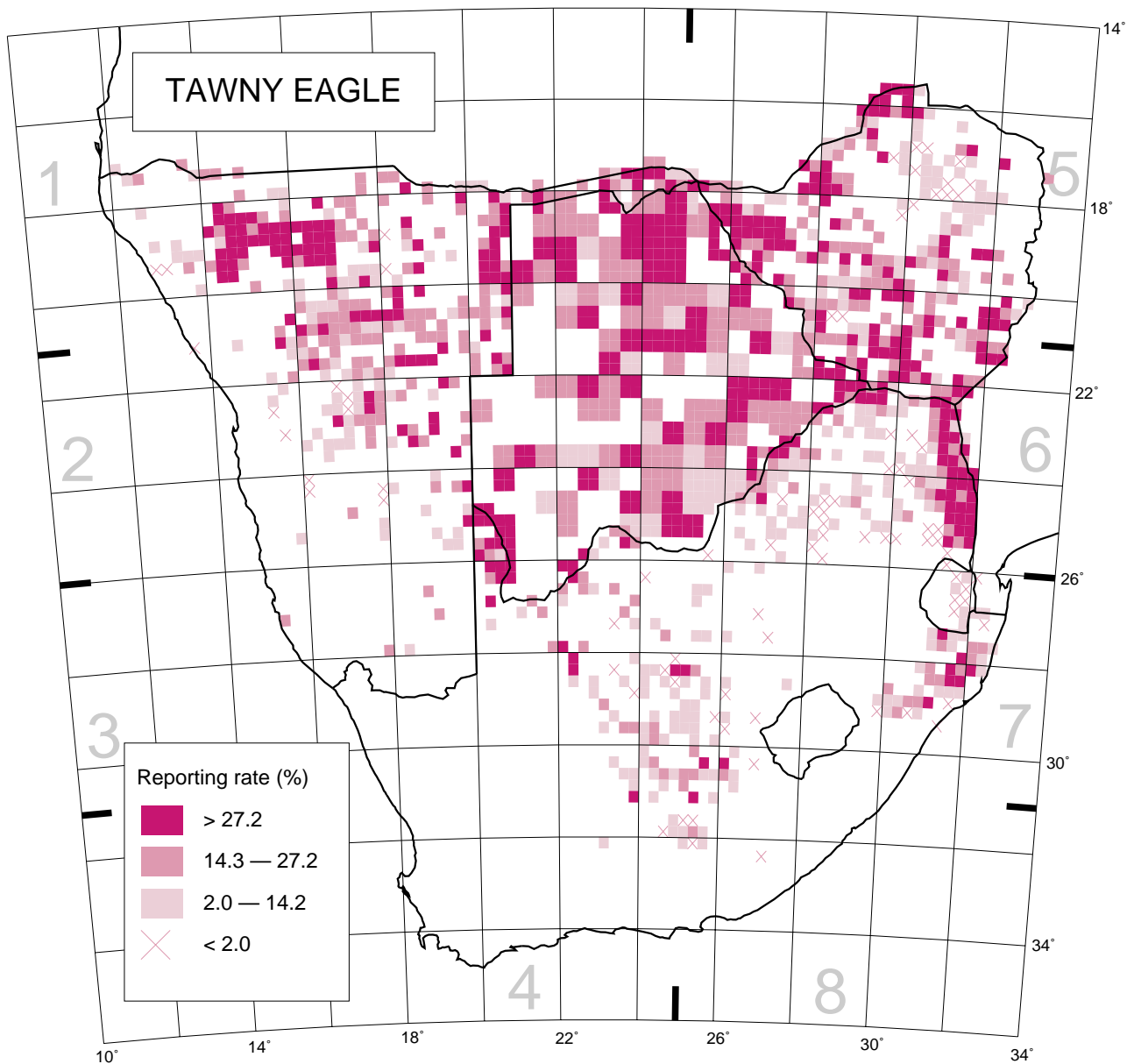
Historical distribution and conservation: Evidence for a decrease in the range was given by Boshoff *et al.* (1983) who found it further west in the Karoo pre-1969 than at present. It is known to have decreased in range and numbers in the Transvaal (Tarboton & Allan 1984). It is also presently declining in Namibia with no apparent recruitment from elsewhere (Brown 1991a). It suffers from both inadvertent and deliberate poisoning, and from shooting (Tarboton & Allan 1984; Brown 1991a). The scavenging habits of the Tawny Eagle makes it a non-target victim of a few farmers who indiscriminately place poisoned baits for small-livestock predators (Tarboton & Allan 1984; Brown 1991a). It does not feature in the South African Red Data book (Brooke 1984b), probably because the extent of its decline was not appreciated at that time. Fortunately, there appear to be viable populations in several of southern Africa's national parks.

R.E. Simmons

Recorded in 1467 grid cells, 32.3%
Total number of records: 8564
Mean reporting rate for range: 18.0%

Reporting rates for vegetation types





Models of seasonality for Zones. Number of records (top to bottom, left to right):
 Occurrence: 640, 351, 211, 4, 1365, 1490, 392, 7; Breeding: 46, 11, 0, 0, 69, 76, 12, 0.